

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY



PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

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Date of mailing
(day/month/year)

12. 4. 2005

Applicant's or agent's file reference
10003484WO01

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2004/019690

International filing date (day/month/year)

22.12.2004

Priority date (day/month/year)

24.12.2003

International Patent Classification (IPC) or both national classification and IPC

Int.Cl. **G03G 15/20, H05B 6/14**

Applicant

CANON KABUSHIKI KAISHA

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Date of completion of this opinion

Name and mailing address of the ISA/JP

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3203

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2004/019690

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
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International application No.

PCT/JP2004/019690

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1 - 5</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>3</u>	YES
	Claims	<u>1, 2, 4, 5</u>	NO
Industrial applicability (IA)	Claims	<u>1 - 5</u>	YES
	Claims		NO

2. Citations and explanations

D1: JP 2000-039797 A(MATSUSHITA GRAPHIC COMMUNICATION SYSTEMS, Inc.), 2000.02.08, line 15, column 6 to line 6, column 7, lines 11-44 column 8, Fig 3(a) (Family:none)

D2: Microfilm of the specification and drawings annexed to the written application of Japanese Utility Model Application No. 117773/1989(Laid-open No. 56960/1991) (RICOH Co.), 1991.05.31, lines 13-18, page 4, lines 4-11, page 6, Figs 1-3 (Family:none)

D3: JP 09-306652 A(RICOH Co.), 1997.11.28, lines 22-48, column 3, Fig 1 (Family:none)

Claims 1,4,5

The subject matter of claims 1,4,and 5 does not appear to involve an inventive step in view of D1 cited in the ISR and D2 cited in the same.

D1 discloses a Curie temperature of a electromagnetic induction heating roller is set to be higher than a fixation temperature.D2 discloses a thickness of a heating roller in an area outside an area corresponding to a small-sized paper is larger than that in the area corresponding to a small-sized paper.

The inventions disclosed in D1 and D2 share the problem in that overheating at the non-sheet passing portion at the time of passing the small-sized paper is suppressed. The person skilled in the art would easily conceive the idea of applying the technical feature employed in D2 to the invention disclosed in D1.

The technical feature that a Curie temperature is lower than a heat-resistant temperature of a heating apparatus is not disclosed in D1 and D2. However, the skilled person would regard the technical feature as a normal option.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: **V**

Claim 1,4,5

The subject matter of claim 1 does not appear to involve an inventive step in view of D3 cited in the ISR and D1 cited in the same.

D3 discloses a thickness of a heating roller in an area outside an area corresponding to a small-sized paper is larger than that in the area corresponding to a small-sized paper in an induction heating type heating apparatus.

The inventions disclosed in D3 and D1 share the problem in that overheating at the non-sheet passing portion at the time of passing the small-sized paper is suppressed. The person skilled in the art would easily conceive the idea of applying the technical feature employed in D1 to the invention disclosed in D3.

The technical feature that a Curie temperature is lower than a heat-resistant temperature of the heating apparatus is not disclosed in D3 and D1. However, the skilled person would regard the technical feature as a normal option.

Claim 2

The subject matter of claim 2 does not appear to involve an inventive step in view of D1 cited in the ISR and D2 cited in the same.

D1 discloses an induction eddy current concentrates on the surface portion of the heating roller by the skin effect (line 20-24, column 6).

Claim 3

The subject matter of claim 3 is neither disclosed in any of the documents cited in the ISR nor obvious to a person skilled in the art and is considered to involve an inventive step over the documents cited in the ISR.